Reviewer’s report

Title: Spontaneous adrenocorticotropic hormone (ACTH) normalisation due to tumour regression induced by metyrapone in a patient with ectopic ACTH syndrome: Case report and literature review

Version: 0 Date: 29 Jan 2018

Reviewer: Roberto Salvatori

Reviewer's report:

This paper describes a case of ectopic ACTH syndrome (EAS) in which the tumor reduced in size and ACTH reduced during therapy with metyrapone. These results are extremely surprising, and go against common expectation that ACTH level would either increase or not change upon reduction of cortisol burden by a steroidogenesis inhibitor. The authors describe other similar reports where similar event was described.

One has to wonder if this event was just coincidental, and that tumor infarcted independently. The authors do address this possibility.

Minor points:

1. Case presentation line 16 "after stimulation with 8 mg of dexamethasone" should read "after suppression..."

2. Just below, the 8 mg test is done to differentiate Cushing disease from EAS. As such it does not necessarily suppress to below 1.8. I would just write that lack of suppression by 8 mg of dex is consistent with EAS

3. Following page, line 22. "its content" maybe "its level"

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?  
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Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English  
Please indicate the quality of language in the manuscript:

Acceptable

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